

through the plate; and means for raising and lowering the mixing plate relative to the reservoir.

Please amend claim 2 as follows:

2. (once amended) [Apparatus]The apparatus as claimed in claim 1 wherein the reservoir further comprises means for adding samples in liquid suspension to the reservoir by means of a reagent feed pipe and means for removal or re-circulation of unused liquids from the reservoir by means of an overflow pipe.

Please amend claim 3 as follows:

3. (once amended) [Apparatus]The apparatus as claimed in [claims 1 or 2]claim 1 wherein the mixing plate contains an array of holes extending through the plate, the holes being in fixed relationship one with another.

Please amend claim 4 as follows:

4. (once amended) [Apparatus]The apparatus as claimed in claim 3 wherein the mixing plate contains an array of 24-, 96- or 384- holes.

Please amend claim 5 as follows:

5. (once amended) [Apparatus]The apparatus as claimed in [any of claims 1-4]claim 1 wherein the means for raising and lowering the mixing plate inside the reservoir comprises at least one piston in contact with the outer casing of the apparatus and operatively connected to an air supply.

Please amend claim 6 as follows:

6. (once amended) [Apparatus]The apparatus as claimed in [any of claims 1-4]claim 1 wherein the means for raising and lowering the mixing plate inside the reservoir comprises a toothed drive wheel into which is set an eccentric peg which engages a slot in the outer casing of the apparatus, the drive wheel being driven through a gear train and drive shaft by electric servo drive motor.

Please amend claim 7 as follows:

7. (once amended) A method for mixing and maintaining particulate materials in liquid suspension, using the apparatus according to [any one of claims 1-6]claim 1, the method comprising the steps of introducing a liquid suspension of particulate materials to the mixing chamber reservoir, actuating the mixing plate inside the reservoir so as to mix and maintain the particulate materials in liquid suspension.

### **In the Abstract**

Please add the following abstract on a separate sheet:

-- Abstract

An apparatus is provided for mixing and maintaining particulates in liquid suspension, the apparatus comprising a reservoir for holding a fluid containing dispersed particles, a substantially horizontally-disposed mixing plate mounted inside the reservoir, the mixing plate having a plurality of vertical holes extending through the plate, and means for raising and lowering the mixing plate inside the reservoir. --